

FIELD DATA REPORT

**December 2006 Quarterly WDR Monitoring Program
Former C-6 Facility
Torrance, California**

Prepared By:

**Tait Environmental Management, Inc.
701 N. Parkcenter Dr.
Santa Ana, California 92705**

December 22, 2006



Tait Environmental Management, Inc.
Engineering • Environmental • Compliance

December 22, 2006

Mr. Joseph Weidman
Haley & Aldrich, Inc.
3 West Carrillo St.
Suite 201
Santa Barbara, CA 93101

Subject: Field Data Report for the December 2006 Quarterly WDR Monitoring Program, Former C-6 Facility, Torrance, California.

Dear Mr. Weidman:

This letter summarizes and presents the field data collected during December 2006 Quarterly WDR Monitoring Program at the Former C-6 Facility in Torrance California. The groundwater sampling activities were performed in accordance with the following:

- *Quarterly WDR Abbreviated Sampling Plan December 2006 by CDM for Boeing Realty Corporation (BRC), Date December, 2006*
- *Table 1: December 2006 Quarterly WDR Monitoring Program, Former C-6 Facility Site, Los Angeles, California, from CDM, Dated June 2006.*

The following is a brief summary of our field activities:

- A total of 16 monitoring wells were gauged for depth to water and total depth on December 4th 2006. These wells were also inspected during gauging for any damage or missing materials. One well-box seal was replaced during the inspection.
- A total of 16 monitoring wells were purged and sampled between December 4th and 7th, 2006 using a Monsoon pump, Horiba water tester with flow through cell and Solinst water level meter. The wells were sampled using low flow purging methods. Ferrous iron and hydrogen sulfide testing were performed in all WDR wells using Hach DR/890 field instrument.
- The samples were analyzed WDR monitoring parameters in accordance with the Abbreviated Sampling plan prepared by CDM. A normal turnaround time of 10 days was requested for the lab analysis of all samples.
- Purge water was transported to a storage tank in the treatment compound.

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BOE-C6-0052451



December 22, 2006
December 2006 Quarterly WDR Monitoring Program
Boeing Realty Corporation, Former C-6 Facility, Torrance California

Please contact the undersigned at (714) 560-8200, if you have any questions or comments.
TEM is pleased to be of continued service to Boeing Realty Corporation.

Sincerely,

Tait Environmental Management, Inc.

A handwritten signature in cursive script, appearing to read "Carmen Lo".

Carmen Lo
Environmental Analyst

A handwritten signature in cursive script, appearing to read "Mehmet Pehlivan".

Mehmet Pehlivan, PG, CHG
Senior Hydrogeologist

Cc:

Robert P. Scott, Boeing Realty Corporation
Ravi Subramanian, CDM
Beth Breitenbach, Haley & Aldrich

Attachments:

- A:** December 2006 Quarterly WDR Abbreviated Sampling Plan
- B:** Daily Field Reports and Daily Health & Safety Sign Off Sheets
- C:** Chain of Custody Records, Groundwater Sampling Data Sheets

Quarterly WDR Abbreviated Sampling Plan

December 2006

Building 2, Former C-6 Facility

Boeing Realty Corporation,

Los Angeles, California

Table 1 presents the details of the Quarterly WDR groundwater monitoring program as required by the general Waste Discharge Requirements Order No. R4-2002-0030: Series 007. WDR wells will be gauged prior to collecting groundwater samples to determine static water levels and total well depth. Low-flow purging to maintain uniform flow rates on the order of 0.1 to 0.5 liters/min will be used to collect groundwater samples and minimize disturbance to the groundwater in the well such that drawdown is less than 0.3 foot. Please note that IRZB0081 and IRZB0095 are ¾-inch diameter wells and need to be sampled with appropriately sized low-flow pump (such as Geoprobe Pump or equal). Samples collected from each well will be tested for biogeochemical parameters using a YSI unit, field test kits, and fixed-base laboratory analyses. The YSI unit, with flow through cell, will be used to measure pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), Electrical Conductivity (EC), and temperature. Hach, Inc. field test kits will be used to measure ferrous iron (Fe [II]) and hydrogen sulfide for the WDR wells as shown on Table 1. Following field test kit analyses, all samples will be collected for analysis of volatile organic compounds (VOCs) by EPA Method 8260B and total sulfides by EPA Method 376.1 or approved equal. All other procedures, including quality assurance (QA) and data validation, will be as described in the 2006 Groundwater Monitoring Work Plan (CDM, January 31, 2006).

Table 1
December 2006 Quarterly WDR Monitoring Program
Former C-6 Facility
Los Angeles, California

Well ID	Water Bearing Unit	Sampling Order ¹	Quarterly Groundwater and WDR Event Analytical Program December 2006				
			Water Level Gauging	VOCs	Total Sulfides	Field Parameters ²	Hydrogen Sulfide (Field Measurement)
Groundwater Monitoring Wells - WDR							
CMW001	C-Sand	1	x	x	x	x	x
CMW002	C-Sand	3	x	x	x	x	x
CMW026	C-Sand	6	x	x	x	x	x
Bioremediation Monitoring Wells - WDR							
IRZB0081	B-Sand	4	x	x	x	x	x
IRZB0095	B-Sand	8	x	x	x	x	x
IRZMW001A	B-Sand	15	x	x	x	x	x
IRZMW001B	B-Sand	10	x	x	x	x	x
IRZMW002A	B-Sand	14	x	x	x	x	x
IRZMW002B	B-Sand	7	x	x	x	x	x
IRZMW003A	B-Sand	16	x	x	x	x	x
IRZMW003B	B-Sand	5	x	x	x	x	x
IRZMW004	B-Sand	11	x	x	x	x	x
IRZMW005	B-Sand	12	x	x	x	x	x
IRZCMW001	C-Sand	9	x	x	x	x	x
IRZCMW002	C-Sand	2	x	x	x	x	x
IRZCMW003	C-Sand	13	x	x	x	x	x
Quality Control Samples							
Duplicates (1 per 20 wells)				x (est. 1)			
Rinsate Blanks (1 per day)				x (est. 2)			
Field Blanks (1 per day)				x (est. 2)			
Decon Water (1 per day)				x (est. 2)			
Trip Blanks (1 per day)				x (est. 2)			

Notes:

est. = Quality control sample number estimated based on estimated number of sampling days.

VOCs = Volatile organic compounds by EPA Method 8260B and Total Sulfides by EPA Method 376.1 or EQUAL

¹ Sampling order for December 2006 based on the results of the September 2006 quarterly event

² Field Parameters = pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), electrical conductivity (EC), temperature, ferrous iron, and hydrogen sulfide



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Daily Tailgate Health & Safety Meeting Agreement and Acknowledgement Sheet

Project Name: C-6 Torrance (6h) Sampling Event (Dec 2006)	Project #: EM 2727
Site/Area Location/Well ID: C-6 Torrance	
Date(s) Work Performed: 12/4/2006	Time: 7:00
Name Of Person Giving Tailgate Print Name: Kevin Lambert Signature: <i>Kevin Lambert</i>	Affiliation: TAIT
Site-Specific Health & Safety Meeting Topics: PPE, Traffic, Hospital Location, Route.	

I have reviewed the plan, understand it, and agree to comply with all of the health and safety requirements. I understand that I may be prohibited from working on the project for violating any of the requirements. Visitors will be required to be escorted in the restricted access zone. Visitors must comply with Tait Environmental Management, Inc. escort directions while on site at all times. Non-compliance with escort directions will not be tolerated, and violators will be requested to leave the site immediately.

A physician based on medical examination has approved me to wear a respirator. I have been trained in the appropriate use, care, and storage of respiratory equipment. I have been respirator fit tested; and I have my respirator available for use in the field. I understand that I am to use the equipment supplied to me by my employer. I further understand that this equipment is provided solely for my benefit with the intent to minimize my exposure to potentially hazardous conditions. In the event of such usage, I agree to indemnify and hold harmless Tait Environmental Management, Inc. and all of its employees from and against any and all losses, demands, claims, liabilities, lawsuits, damages, costs, and expenses arising, in any way, from the use of the equipment.

Date	Name	Company Name	Signature
12/4/06	Carmen Lo	TAIT	<i>Carmen Lo</i>
12/4/06	Lester W. Jones	TAIT	<i>Lester W. Jones</i>
12-4-06	MPH/MCZ PONTIAC	EMM	<i>[Signature]</i>
12-04/06	Kevin Lambert	TAIT	<i>Kevin Lambert</i>



**Daily Tailgate Health & Safety Meeting
Agreement and Acknowledgement Sheet**

Project Name: C-6 Quarterly WDR Sampling	Project #: EM2727
Site/Area Location/Well ID:	
Date(s) Work Performed: 12/06/06	Time: 0730
Name Of Person Giving Tailgate Print Name: Kevin Lambert Signature: Kevin Lambert	Affiliation: TAIT
Site-Specific Health & Safety Meeting Topics: PPE, traffic, hospital route.	

I have reviewed the plan, understand it, and agree to comply with all of the health and safety requirements. I understand that I may be prohibited from working on the project for violating any of the requirements. Visitors will be required to be escorted in the restricted access zone. Visitors must comply with Tait Environmental Management, Inc. escort directions while on site at all times. Non-compliance with escort directions will not be tolerated, and violators will be requested to leave the site immediately.

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Date	Name	Company Name	Signature
12/06/06	Kevin Lambert	TAIT	Kevin Lambert
12/06/06	Carmen Lo	TAIT	Carmen Lo
12/06/06	Lester Wignora	TAIT	Lester Wignora



Tait Environmental Management, Inc.
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Daily Tailgate Health & Safety Meeting Agreement and Acknowledgement Sheet

Project Name: C-6 Quarterly WDR.	Project #: EM 2727.
Site/Area Location/Well ID: Sampling	
Date(s) Work Performed: 12/06/06	Time: 7:30.
Name Of Person Giving Tailgate Print Name: Kevin Lambert. Signature: Kevin Lambert	Affiliation: TAIT.
Site-Specific Health & Safety Meeting Topics: PPE, Traffic, Hospital Route & location	

I have reviewed the plan, understand it, and agree to comply with all of the health and safety requirements. I understand that I may be prohibited from working on the project for violating any of the requirements. Visitors will be required to be escorted in the restricted access zone. Visitors must comply with Tait Environmental Management, Inc. escort directions while on site at all times. Non-compliance with escort directions will not be tolerated, and violators will be requested to leave the site immediately.

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Date	Name	Company Name	Signature
12/07/06	Kevin Lambert	TAIT	Kevin Lambert
12/07/06	Carmen Lo.	TAIT	Carmen Lo.

DAILY FIELD REPORT

Project Name: QUARTERY WRA C-6	Project #: EM-2727	Date: 12/4/06
Personnel: LW, KL, Aaron	Sub Contractors: None	
Task: GW SAMPLING, PURGING, GAUGING		

Time Arrived at Site: 7:00	Time Left Site:	Total Hours at Site:
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: 29484
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: 1092
- PID/FID Type: Mini RAO Serial #: #1
- Submersible Pump Type: _____ Serial #: _____
- Generator Type: _____ Serial #: _____
- Company Truck License #: 6P4926
- Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

ARRIVED AT 7:00. Meeting, Comment & Kestral
 WE DISCUSSED SCOPS OF WORK WENT OVER ALL DETAILS
 TAILGATE MEETING.
 8:30. I WENT TO HOME DEPOT FOR MATERIAL

Client Signature (if applicable): _____ **Date:** _____

Project Name: QUARTERS WRA / C-6	Project #: EM 2727	Date: 12/4/06
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9:30 - ARRIVED BACK AT SITE.

9:45 - CALIBRATED EQUIPMENT & DECON EQUIPMENT

10:15 - SET-UP 3 BUCKET WASH. GAUGE SIX WELLS

IRZMW-001A THEN IRZMW-003B.

11:00 FINISHED GAUGING SET-UP TO PURGE

WELL IRZMW-003B EB-TMT-120406-0001 - 1105

11:10 STARTED PURGING

11:55 STOPPED PURGING - SAMPLED AT 1200
14 LITERS. CLEANED UP

12:15 DECON EQUIPMENT TOOK EB-TMT-120406 AT 1220

SETUP STARTED PURGING AT 1225 IRZMW002B

STOPPED PURGING AT 1310. TOOK SAMPLES AT 1315
15 LITERS OF PURGED WATER.

DECON EQUIPMENT.

13:35 SETUP ON IRZMW001B STARTED PURGING AT 1335

14:20 FINISHED PURGING TOOK SAMPLES AT 1425 / 1430
PURGED 15 LITERS.

DECON EQUIPMENT.

SET-UP ON IRZMW003A

15:00 STARTED PURGING.

15:45 FINISHED PURGING 14 LITERS

15:50 SAMPLES SAMPLED WELL. CLEANED UP

DECON EQUIPMENT. BACK TO COMPOUND

16:15 CLEANED UP. TRANSFER WATER.

LEFT SITE AT 1700

DAILY FIELD REPORT

Project Name: QUARTERLY WDR C-6	Project #: EM-2727	Date: 12/6/06
Personnel: LW, KL, Cameron	Sub Contractors: None	

Task: GW Sampling & Purging

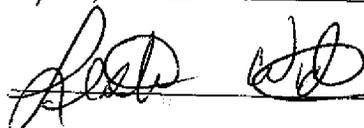
Time Arrived at Site: 6:05	Time Left Site: 14:30	Total Hours at Site: 8.5
Odometer (Start): N/A	Odometer (End): N/A	Total Miles: N/A

Equipment List:

- Solinst Water Level Meter Serial #: ~~1092~~ 29484
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: 1092
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: _____ Serial #: _____
- Generator Type: _____ Serial #: _____
- Company Truck License #: 6P4195
- Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

ARRIVED AT 6:15. CALIBRATED EQUIPMENT & DECON
 TAILGATE LOADED TRUCK. HEAD OVER TO WOU
 IRRAWOORA. SET-UP
 8:00 STARTED PURGING

Client Signature (if applicable):  **Date:** 12/6/06

Project Name: <u>Quincy WDR C-6</u>	Project #: <u>EM-2727</u>	Date: <u>12/6/06</u>
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8:45 FINISHED PURGING

8:50 SAMPLES WERE 15 LITER TOTAL PURGED
CLEANED UP. DISCON EQUIPMENT.
SET-UP ON IRZEMW001A.

9:25 STARTED PURGING.

10:10 STOPPED PURGING 15 LITERS

10:15 SAMPLE WERE

10:22 FIELD BLANK CLEANED UP OFF
DISCON EQUIPMENT ON TO NEXT WELL
SET UP ON
IRZEMW001 STARTED PURGING AT 10:50

11:35 STOPPED PURGING - 15 LITERS

11:40 SAMPLES TAKEN. CLEANED UP DISCON EQUIPMENT.

12:45 SET UP ON IRZEMW003. STARTED PURGING

13:30 STOPPED PURGING

13:35 SAMPLED WELL.
CLEANED UP. WENT TO COMPOUND. DISPOSED
IN WATER. GAVE KEVIN MY DISCON EQUIPMENT
CLEANED COMPOUND LEFT AT 14:30.

DAILY FIELD REPORT

C-6

Project Name: <u>Quarterly WDR</u>	Project #: <u>EM2727</u>	Date: <u>12/06/06</u>
Personnel: <u>KL, LW, CL</u>	Sub Contractors: <u>—</u>	

Task: Continue sampling wells

Time Arrived at Site: <u>0730</u>	Time Left Site:	Total Hours at Site:
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: TAIT - 4
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: 1010
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: Monsoon Serial #: 1114
- Generator Type: _____ Serial #: _____
- Company Truck License #: F-150
- Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

0730 Arrive @ Site. Decon equip & conduct H&S meeting. Prep. bottles.
0900 Set up on CMW002.
1000 Finish sampling CMW002. Set up on CMW026.

Client Signature (if applicable): _____ Date: _____

C-6

Project Name: Quarterly WDA Sampling	Project #: EN2727	Date: 2/06/06
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1100 Finished sampling CW026. Set up on IRZ MW004.
1200 Finished sampling IRZ MW004. Break for lunch.
1240 Return from lunch. Set up on IRZ MW005.
1400 Finish sampling IRZ MW005. Return to compound.
1500 Leave site.



Tait Environmental Management, Inc.

DAILY FIELD REPORT

Project Name: C-6 Torrance GWS. Dec 2006	Project #: EM2727	Date: 12/06/06
Personnel: CL	Sub Contractors: —	

Task: Conduct Groundwater Sampling on the Site.

Time Arrived at Site: 7:00	Time Left Site: 14:30	Total Hours at Site: 7.5
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: _____
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: _____
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: _____ Serial #: _____
- Generator Type: _____ Serial #: _____
- Company Truck License #: _____
- Other(s): Hack DR/890. & Laptop

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

7:00 Arrived the Site & got ice in water.

7:15 Prepared Sampling Bottles & Labels for today

Client Signature (if applicable): _____ **Date:** _____

DAILY FIELD REPORT

Project Name: <u>Quarterly WDR Sampling</u>	Project #: <u>EM2727</u>	Date: <u>12/07/06</u>
Personnel: <u>KL, CL</u>	Sub Contractors:	

Task: Sample remaining WDR wells.

Time Arrived at Site: <u>0830</u>	Time Left Site:	Total Hours at Site:
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: TAIT-4
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: 1010
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: Geoprobe bladder pump Serial #: ###
- Generator Type: _____ Serial #: _____
- Company Truck License #: Ford F-150
- Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

0830 Arrive @ site. Sign H&S. Prep for day's sampling.
0930 Talk to Lester regarding sampling NW 65 @ C-1.

Client Signature (if applicable): _____ Date: _____

Project Name: WDR Quarterly,	Project #: 2727	Date: 12/07/06
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Sample remaining WDR wells & then wrap up sampling event (clean site, return equipment, etc.).

1200 Attempted to use Geo Control Pro bladder ~~bladder~~ ~~site~~ pump on IR2B0081 &

IR2B0095 (3/4" diameter wells) as requested by Hallett Adrich. 1/2" bladder pump is 18" long. When tubing was

connected to pump & put down well, pump would stick & would not go down deeper than 4". Called Mehmet P. (TAET) to

discuss situation. We decided to return to ^{using} Watterra pump to purge these wells.

1400 Finish Sampling IR2B0081. Set up on IR2B0095.

1515 Finish Sampling IR2B0095. Return to compound.

1530 Clean up & leave to drop off equipment to Bisco.



DAILY FIELD REPORT

Project Name: C-6 Torrance Quarterly GWS Events	Project #: EMR77	Date: 12/7/06
Personnel: CL	Sub Contractors:	

Task: Conduct Groundwater Sampling

Time Arrived at Site: 8:00	Time Left Site: 15:30	Total Hours at Site: 7.5
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: _____
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: _____
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: _____ Serial #: _____
- Generator Type: _____ Serial #: _____
- Company Truck License #: _____
- Other(s): Laptop in Hack DR1890

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

8:00 Arrived site & Got water
& Ice. Signed H&S.
8:30 Prepared Bottles & Labels.
9:30 Set up Computer & ~~Print~~

Client Signature (if applicable): _____ **Date:** _____



Project Name: C-6 Torrance Quarterly AWS Event.	Project #: EM2727	Date: 12/7/06
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talked to Del Mar & Set up
the Sampling Event for C-1 CB (M611056)

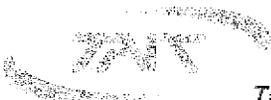
10:00 Started prepare CoC, Ecoc

11:50 Ferrous Iron & Hydrogen Sulfide
Test on site for IRZB0081 &
IRZB0095

Continued Ecoc

Dropped off samples
& extra bottles to
Lab.

15:30 Wrap up & deliver
samples to Lab



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Environmental Remediation & Construction

DAILY FIELD REPORT

Project Name: C-6 Torrance GW	Project #: EM2727	Date: 12/04/06
Personnel: CL	Sub Contractors: -	

Task: Conducting groundwater sampling on the site.

Time Arrived at Site: 7:00	Time Left Site: 16:30	Total Hours at Site: 9.5
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: _____
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: _____
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: _____ Serial #: _____
- Generator Type: _____ Serial #: _____
- Company Truck License #: _____
- Other(s): Hack DR/890, Laptop

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

7:00 Kick-off meeting

7:30 Get ice & water

7:50 Started Preparing Labels in Sample Bottles.

Client Signature (if applicable): _____ **Date:** _____



DAILY FIELD REPORT

Project Name: C-6 Quarter/4 WQ Sampling	Project #: EM 2727	Date: 12/04/16
Personnel: KL, CL, MP, LW	Sub Contractors: —	

Task: Gauge 16 wells. Start sampling of 16 wells w/ Monsoon pumps using low-flow purge.

Time Arrived at Site: 0700	Time Left Site:	Total Hours at Site:
Odometer (Start):	Odometer (End):	Total Miles:

Equipment List:

- Solinst Water Level Meter Serial #: TAIT - 1
- Solinst Water/Product Level Interface Meter Serial #: _____
- Horiba U-22 Water Quality Meter Serial #: 1010
- PID/FID Type: _____ Serial #: _____
- Submersible Pump Type: Monsoon Serial #: 1114
- Generator Type: _____ Serial #: _____
- Company Truck License #: F-150
- Other(s): _____

Description of Work Performed: (Summarize all field activities in a chronological sequence. Include tailgate health and safety meeting, personnel/visitors at site, calibration times and methods.)

0700 Arrive @ site. Meet w/ sampling team & discuss sampling event. Conduct H&S meeting. Prep equip. Begin gauging w/ Lester w. 16 wells.

Client Signature (if applicable): _____ **Date:** _____



C-6

Project Name: Quarterly WML Sampling	Project #: EM2727	Date: 12/04/06
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1200 Finished gauging of 16 wells. Break for 1/2 hour lunch.

1230 Set up on CMW001.

1330 Finish sampling CMW001. Set up on IR2CMW002.

1500 Finish sampling IR2CMW002. Meet w/ Lester W to see how he is progressing.

1530 Return to compound to pump out & purge water & meet w/ lab. Leave site.



Del Mar Analytical

A TEST AMERICA COMPANY

17461 Delian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3299
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4687 FAX (909) 370-1046
9830 South 51st St., Suite B-12D, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 796-3628

ITL 0295

COC#

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:		Project/PO Number:		Analysis Required			
TAIT 701 N. Parkcenter Dr Anaheim, CA Project Manager: Mehmet Reblivon Sampler: KLI/LW/CL		EM 2727 Phone Number: (714) 560-8613 Fax Number: (714) 560-8235					
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Special Instructions
TB-TAIT120406-0001	Aqueous	Vial	3	12/04/06	-	HCE	
EB-TAIT120406-0001			3		11:05		
DB-TAIT120406-0001			3		13:20		
FB-TAIT120406-0001			3		13:45		
IRZM0001B-WGR0406-0001		Various	4		14:25	VARIOUS	
IRZM0001B-WGR0406-0002			4		14:30		
IRZM0002B-WGR0406-0001			4		13:15		
IRZM0002B-WGR0406-0001			4		12:00		
OM0001-WGR0406-0001			4		13:06		
IRZCM0002B-WGR0406-0001			4		14:16		
IRZM0003A-WGR0406-0001			4		15:50		
Relinquished By: Mehmet Reblivon		Date/Time: 12/04/06 16:10	Received By: Gunn/Lo		Date/Time: 12/04/06 16:10	Turnaround Time: (Check)	
Relinquished By: Gunn/Lo		Date/Time: 12/04/06 16:15	Received By: BO/Cloace		Date/Time: 12/4/06 16:15	same day 72 hours 24 hours 5 days 48 hours normal	
Relinquished By:		Date/Time:	Received in Lab By:		Date/Time:	Sample Integrity: (Check) intact on ice	

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.



Del Mar Analytical

A TEST AMERICA COMPANY

CHAIN OF CUSTODY FORM

Client Name/Address: TAIT N. Parkcenter Dr Project/PO Number: C6 Terrace Page 1 of 1

701 N. Parkcenter Dr
Santa Ana, CA
Project Manager: Medina Redondo
Sampler: REPELLER

Phone Number: (714) 560-8615

Fax Number: (714) 560-8055

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required						Special Instructions
							8200 B	TOTAL	TAIT	TAIT	TAIT	TAIT	
TB-TAIT120606-0001	WATER	VIAL	3	7/12/06	7:00	HYCE	X	X	X	X	X		
FB-TAIT120606-0001			3	8:00			X	X	X	X	X		
DB-TAIT120606-0001			3	8:30			X	X	X	X	X		
FB-TAIT120606-0001			3	10:22			X	X	X	X	X		
IRZMMW001A-WG120606-0001		VIAL	4	10:15	VARIOUS		X	X	X	X	X		
IRZMMW002A-WG120606-0001			4	8:50			X	X	X	X	X		
CMW002-WG120606-0001			4	9:41	10:35		X	X	X	X	X		
IRZCMW003-WG120606-0001			4	10:31			X	X	X	X	X		
CMW004-WG120606-0001			4	13:32			X	X	X	X	X		
IRZCMW005-WG120606-0001			4	11:40			X	X	X	X	X		
IRZCMW001-WG120606-0001			4	11:34			X	X	X	X	X		
IRZCMW004-WG120606-0001			4				X	X	X	X	X		

Relinquished By: Mano Yambert Date/Time: 12/06/06 Received By: Mano Jr Date/Time: 12/06/06

Relinquished By: Mano Jr Date/Time: 12/06/06 Received By: Mano Jr Date/Time: 12/06/06

Relinquished By: Mano Jr Date/Time: 12/06/06 14:45 Received By: Mano Jr Date/Time: 12/06/06 14:45

Turnaround Time: (Check)
 same day _____ 72 hours _____
 24 hours _____ 5 days _____
 48 hours _____ normal _____

Sample Integrity: (Check)
 intact _____ on ice 4.1

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.



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17461 Dertian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3299
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4687 FAX (909) 370-1046
 9890 South 51st St., Suite B-12D, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 796-3628

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:		Project/PO Number:		Analysis Required																
701 N. Parkcenter Dr Santa Ana, CA		C-6 Torrance EM 2727		Total Sulfide																
Project Manager: Mehmet Pellivan		Phone Number: (714) 560-8615																		
Sampler: KLICL		Fax Number: (714) 560-8285																		
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives														Special Instructions
TB-TAIT 120706-000	Aqueous	40ml VOA	2	12/07/06	-	HCl	X													
EB-TAIT 120706-000			3		8:30		X													
DB-TAIT 120706-000			3		9:00		X													
FB-TAIT 120706-000			3		14:30		X													
IRZB0081 W6R20706-000		various	4		13:50	various	X													
IRZB0095 W6R20706-000			4		14:50		X													
Relinquished By: <i>[Signature]</i>		Date/Time: 12/07/06 15:10		Received By: <i>[Signature]</i>		Date/Time: 12/07/06 15:10		Turnaround Time: (Check)												
Relinquished By: <i>[Signature]</i>		Date/Time: 12/07/06 15:30		Received By: <i>[Signature]</i>		Date/Time: 12/07/06 15:30		same day _____ 72 hours _____ 24 hours _____ 5 days _____ 48 hours _____ normal _____ X												
Relinquished By: <i>[Signature]</i>		Date/Time: 12/07/06 15:30		Received By: <i>[Signature]</i>		Date/Time: 12/07/06 15:30		Sample Integrity: (Check) intact _____ on ice <i>[Signature]</i> 20												

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

GROUNDWATER MONITORING WELL GAUGING DATA
 December 2006 FORMER C-6 FACILITY GAUGING EVENT



Water in top of well
 Box IRZB008F

Well ID	DATE	WELL DIAMETER	TIME	PID (DDM)	MEASUREMENT POINT	DEPTH TO WATER	SECONDARY TO WATER	TOTAL DEPTH	PERSONNEL	Comments/Well Condition		
										Well Box/Casing	Obstruction	Well Cap & Lock
CMW001												
CMW001R/H06	8:20	4"	8:20	0.7	TOC MARK	63.56	63.56	124.35	K4CL	Good	No	Add Seal Yes.
CMW002	9:00	4"	9:00	0.0	TOC MARK	62.03	62.03	124.07	K4CL	Good	No	Yes
IRZM002	8:40	4"	8:40	0.0	TOC MARK	64.60	64.60	121.34	K4CL	Good	No	Yes
IRZB008	9:20	3/4"	9:20	0.0	TOC MARK	61.53	61.53	86.53	K4CL	Good	No	Value top of casing
IRZM002B	0940	2"	0940	0.7	TOC MARK	62.44	62.44		K4CL	Bailed water in box	NO	YES
CMW026	10:15	4"	10:15	7.6	TOC MARK	60.31	60.31	118.00	KL	Good	NO	Yes
IRZP008S	10:30	3/4"	10:30	0.0	TOC MARK	61.49	61.49	89.96	KL	Good	NO	Yes
IRZCMW001	10:50	4"	10:50	1.4	TOC MARK	60.48	60.48	116.59	KL	Good	NO	Yes
IRZM004	11:00	4"	11:00	29.4	TOC MARK	61.78	61.78	90.65	KL	Good	NO	Yes
IRZM005	11:15	4"	11:15	23.4	TOC MARK	61.42	61.42	87.94	KL	Good	NO	Yes
IRZM003	11:30	4"	11:30	63.8	TOC MARK	60.43	60.43	117.75	KL	Good	NO	Yes
IRZM006A	10:50	2"	10:50	30.6	TOC MARK	65.20	65.20	75.36	LW	Good	No	Yes
IRZM006B	10:40	2"	10:40	1.0	TOC MARK	65.07	65.07	89.93	LW	Good	No	Yes
IRZM002A	10:45	2"	10:45	6.3	TOC MARK	65.09	65.09	77.68	LW	Good	No	Yes
IRZM002B	10:35	2"	10:35	0.3	TOC MARK	65.18	65.18	89.90	LW	Good	No	Yes
1002A	10:55	2"	10:55	45.6	TOC MARK	65.22	65.22	76.59	LW	Good	No	Yes
1002B	10:50	2"	10:50	0.0	TOC MARK	65.19	65.19	92.85	LW	Good	No	Yes



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc.

Project Name: C-6 Quarter 4 GW Sampling NDA Date: 12/07/06
 Project No.: EM 2727 Prepared By: EL
 Well Identification: ITZ80095 Weather: Sunny
 Measurement Point Description: For North Pump Intake: BS Screen: 65-90

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	Casing Volumes (gallons) (E)			1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW x V)	Screen Volume (Screen length x V)	1/2 screen Volume
					One (1) Casing Volume (C x D = E)	Three (3) Casing Volumes (E x 3)	1/2 Casing Volume (E/2)				
---	6.53	89.96	28.43	--	0.56	1.68	0.28	--	--	--	

Field Equipment: Solinst, Horiba
 Purge Method: Water Pump
 Well Conditions: Good

Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1405	0.5	0.28	0.05	*	7.33	21.6	7999	0.213	6.48	-91	Black color
1410	1.0	0.56	0.05		6.71	22.1	7999	0.201	2.27	-89	
1415	1.5	0.84	0.05		6.71	21.5	7999	0.194	2.18	-90	
1420	2.0	1.12	0.05		6.71	22.9	7999	0.193	2.11	-90	
1425	2.5	1.40	0.05		6.71	22.6	7999	0.192	2.10	-90	
1430	3.0	1.68	0.05		6.71	21.9	7999	0.192	2.09	-90	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1400	1430	0.05	1.70	3.0	67.24	67.24	1450	ITZ80095-120706-0001

Notes: Ferrous iron: 0.38 mg/L. Could not obtain Pump Purge water to Hydrogen Sulfide: 0.48 mg/L casing diameter, during pump. Drain No.: Compound tank

Obtained Field blank @ 1430

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc.

Project Name: C6 Quarterly WGR Sampling
 Project No.: EM 2727
 Well Identification: IRZB0081
 Measurement Point Description: TOC, Mark
 Date: 12/27/06
 Prepared By: KC
 Weather: Sunny
 Pump Intake: 285'
 Screen: 64.5' - 89.5'

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	A	B	C	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW x D)	Screen Volume (Screen length x D)	1/2 screen Volume
---	61.58	86.53	24.95	---	0.5	1.5	0.25	---	---	---	---

Field Equipment: Solinst, Horiba
 Purge Method: Water
 Well Condition: Good

Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1305	0.5	0.25	0.05	*	6.37	22.7	7999	0.234	3.43	-98	Black Color / Sulfur
1310	1.0	0.50	0.05		6.58	21.6	7999	0.216	2.90	-111	
1315	1.5	0.75	0.05		6.50	21.6	7999	0.213	2.83	-110	
1320	2.0	1.00	0.05		6.49	22.0	7999	0.211	2.75	-110	
1325	2.5	1.25	0.05		6.50	22.0	7999	0.210	2.65	-108	
1330	3.0	1.50	0.05		6.51	22.0	7999	0.210	2.60	-109	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth B - (C x 80)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1300	1330	0.05	1.60	3.0	66.53	66.53	1350	IRZB0081 WGR0706000

Notes: * Could not obtain DTW during purge. Well casing (0.75") pump purge water to small to hold tubing + solinst probe @ same time.

Ferrous (iron): 0.16 mg/L Hydrogen Sulfide: 0.848 mg/L

ft-bmp = feet below measuring point

September 2006 Quarterly and WDR Monitoring Program
 Former C-6 Facility
 Los Angeles, California

Well ID	Date	Time	Ferrous Iron (mg/L) (Field Measurement)	Hydrogen Sulfide (mg/L) (Field Measurement)	Recorded By	Equipment Type	Comments
IRZMWD001	9/26/06	8:53	0.36	0.159	CL	Hach DR/890	
IRZMWD001A	9/26/06	10:20	0.20	0.159		Hach DR/890	
CHW002		9:45	0.04	0.0636		Hach DR/890	
CHW026		10:35	2.12	0.159		Hach DR/890	
IRZMWD005		13:35	2.52	0.6678		Hach DR/890	
IRZMWD001		11:45	0.04			Hach DR/890	
IRZMWD004		11:20	1.29	0.3074		Hach DR/890	
IRZMWD003		13:40	0.08	0.0222		Hach DR/890	
						Hach DR/890	
						Hach DR/890	
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		
					Hach DR/890		



Groundwater Sampling Data Sheet

Project Name: QUARRY INDR - C-6		Date: 12/6/06									
Project No.: EM 2127		Prepared By: LW									
Well Identification: IRZMN001A		Weather: SUNNY									
Measurement Point Description: TSC BLACKWATER		Pump Intake: 70'									
Screen: 65'-73'											
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C X D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW) X D	1/2 screen Volume			
---	① 65.20 ② 65.20 ③ 65.20	10.16	--	N/A	N/A	N/A	N/A	N/A			
Well Diameter (in)		Gallons/Foot		Field Equipment: Solinst, Horiba							
0.75		2	4	6	Purge Method: S.S. MONSOON						
0.02		0.16	0.65	1.47	Well Condition: GOOD						
Time	Casing/Screen INITIAL	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
940	purged water	4.0	0.27	65.48	7.01	22.9	15	0.181	0.00	24	CLEAR
945	1.5	5.5	0.3	65.45	7.06	22.9	11	0.181	0.00	23	CLEAR
950	1.5	7.0	0.3	65.45	7.04	22.9	5	0.180	0.00	24	CLEAR
955	1.5	8.5	0.3	65.45	7.05	22.9	5	0.180	0.00	24	CLEAR
1000	1.5	10.0	0.3	65.45	7.04	22.9	6	0.180	0.00	24	CLEAR
1005	1.5	11.5	0.3	65.45	7.04	22.9	5	0.180	0.00	24	CLEAR
1010	1.5	13.0	0.3	65.45	7.04	22.9	5	0.180	0.00	24	CLEAR
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification				
9:25	10:10	0.3	15.0	15.0	65.45	10:15	IRZMN001A-N/G/20606-0001				

Notes: Ferrrous Iron: 0.20 mg/L
Hydrogen Sulfide 0.157 mg/L.
DISPOSED OF WATER IN COMPOUND

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAI Environmental Management, Inc

Project Name: Quarry WDR C-6 **Date:** 12/6/06
Project No.: EM 2727 **Prepared By:** LW
Well Identification: IR2 MW 002A-PE **Weather:** Sunny
Measurement Point Description: TOC BLACKMARK **Pump Intake:** 75'

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Screen:	
								Above Screen Volume (Top screen - DTW) x D	1/2 screen Volume
① 65.09	77.68	12.59	--	N/A	N/A	N/A	N/A	N/A	N/A
② 65.09									
③ 65.09									

Field Equipment: Solinst, Horiba

Well Diameter (in): 0.75 **Gallons/Foot:** 2 4 6
Purge Method: S.S. MONSOON
Well Condition: GOOD

Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
8:15	1.5	4.1	0.27	65.29	7.20	22.3	-5	0.205	0.17	-26	Cloudy / BROWN
8:20	1.5	5.6	0.3	65.34	7.22	22.4	-5	0.211	0.16	-26	Cloudy / BROWN
8:25	1.5	7.1	0.3	65.34	7.23	22.4	-5	0.213	0.09	-26	Cloudy / BROWN
8:30	1.5	8.6	0.3	65.34	7.28	22.4	-5	0.218	0.02	-25	Cloudy / BROWN
8:35	1.5	10.1	0.3	65.34	7.27	22.4	700	0.218	0.00	-25	Cloudy / BROWN
8:40	1.5	11.6	0.3	65.34	7.28	22.5	710	0.219	0.00	-25	Cloudy / BROWN
8:45	1.5	13.1	0.3	65.34	7.28	22.5	700	0.219	0.00	-25	Cloudy / BROWN

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x .80) - B	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
8:00	8:45	0.3	15.6	15.6	67.62	65.34	8:50	IR2 MW 002A - 120606-000

Notes: Ferrus Iron: 0.36 mg/L
Hydrogen Sulfide: 0.159 mg/L

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc.

Project Name: <u>C-40 Santa Ana Quarry by WDR Sampling</u>		Date: <u>12/06/06</u>		Prepared By: <u>KL</u>							
Project No.: <u>EM 2727</u>		Weather: <u>Sunny</u>		Screen: <u>99-124</u>							
Well Identification: <u>CMW002</u>		Pump Intake: <u>110</u>									
Measurement Point Description: <u>TOC, MARK</u>											
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C X D ² = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW X P)	Tube Screen Volume (Screen Length x P)	1/2 screen Volume	
	<u>64.98</u>	<u>124.07</u>							<u>4.0</u>		
Well Diameter (in)		Field Equipment: <u>Solinst, Horiba</u>									
Gallons per foot of casing		Purge Method: <u>Monsoon Pump</u>		Well Condition: <u>Good</u>							
Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
<u>0925</u>	<u>Intial Pury</u>	<u>5.0</u>	<u>0.5</u>	<u>62.02</u>	<u>6.69</u>	<u>20.4</u>	<u>12.0</u>	<u>81.2</u>	<u>4.01</u>	<u>70</u>	<u>Pump, Tube & FTC Vol.</u>
<u>0930</u>		<u>7.5</u>	<u>0.5</u>	<u>62.02</u>	<u>7.06</u>	<u>20.2</u>	<u>14.7</u>	<u>83.0</u>	<u>3.68</u>	<u>65</u>	
<u>0935</u>		<u>10.0</u>	<u>0.5</u>	<u>62.02</u>	<u>7.12</u>	<u>20.2</u>	<u>17.6</u>	<u>82.9</u>	<u>3.67</u>	<u>64</u>	
<u>0940</u>		<u>12.5</u>	<u>0.5</u>	<u>62.02</u>	<u>7.13</u>	<u>20.2</u>	<u>17.2</u>	<u>83.0</u>	<u>3.60</u>	<u>63</u>	
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Liters Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x .80)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification		
<u>0915</u>	<u>0940</u>	<u>0.5</u>	<u>13.0</u>	<u>13.0</u>	<u>—</u>	<u>—</u>	<u>62.02</u>	<u>0941</u>	<u>CMW002-W6120606-0001</u>	<u>Sup.</u>	

Notes:
 Ferrons iron: 0.04 mg/L
 Hydrogen sulfide: 0.06 mg/L
 Pumped purge water to compound tank.
 Drum No.:

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

Project Name: QUARRY WDR. C-6
Project No.: EM 2129
Well Identification: IRECMW003
Measurement Point Description: TBC BLACKMARK

Date: 12/6/06
Prepared By: UN
Weather: SUNNY
Pump Intake: 105"

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well			LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW) x D	1/2 screen Volume
		A	B	C						
---	60.40	117.60	57.2	---	N/A	N/A	N/A	N/A	N/A	N/A
60.40	60.40	60.40	60.40	---	N/A	N/A	N/A	N/A	N/A	N/A
60.40	60.40	60.40	60.40	---	N/A	N/A	N/A	N/A	N/A	N/A

Field Equipment: Solinst, Horiba

Purge Method: SS MONSOON
Well Condition: GOOD

Time	Casing/Screen (in)	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1300	1.5	3.8	0.28	60.65	7.41	22.3	11	88.8	0.00	22	CLEAR
1305	1.5	5.3	0.3	60.63	7.45	22.3	12	88.8	0.00	17	CLEAR
1310	1.5	6.8	0.3	60.63	7.47	22.3	14	88.8	0.00	15	CLEAR
1315	1.5	8.3	0.3	60.63	7.46	22.3	10	88.8	0.00	10	CLEAR
1320	1.5	9.8	0.3	60.63	7.46	22.4	9	88.8	0.00	7	CLEAR
1325	1.5	11.3	0.3	60.63	7.46	22.4	9	88.8	0.00	8	CLEAR
1330	1.5	13.8	0.3	60.63	7.46	22.4	8	88.8	0.00	8	CLEAR

Purge Start Time: 1330
Purge End Time: 1335
Average Flow (gpm): 0.3
Total Gallons Purged: 15.45
Total Casing Volumes Purged: N/A
80% Recovery Water Level Depth (C x 80) - B: N/A
Water Level at Sampling Time (ft-bmp): 60.63
Sample Collection Time: 1335
Sample Identification: IRECMW003-UN 120606-0001
 Disposed of water as Compound

Notes: Ferric Iron: 0.08 mg/L
 Hydrogen Sulfide: 0.012 mg/L

ft-bmp = feet below measuring point



TAIT Environmental Management, Inc

Groundwater Sampling Data Sheet

Project Name: Quarterly WDL Sampling - C-6 Date: 12/06/06
 Project No.: EM 2724 Prepared By: KL
 Well Identification: CMW026 Weather: Sunny
 Measurement Point Description: TOC, Mn, K Pump Intake: 100 Screen: 92-117

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A - B = C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (F/2)	Above-Screen Volume (F x Screen Length x 1)	1/2 Screen Volume
---	60.28	118.00	---	---	---	---	---	---	4.2

Field Equipment: Solinst, Horiba
 Purge Method: Monsoon Pump
 Well Condition: Good

Well Diameter (in)	Gallons per foot of casing	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
0.75	2	0.16	0.65	1.47	6.59	21.3	19.0	76.0	3.39	-31	Pump, tube + FRC vol.
0.02	0.16	0.16	0.65	1.47	6.57	21.6	58.0	0.118	1.09	-68	
		5.2	0.5	60.39	6.59	21.8	58.4	0.117	1.05	-69	
		7.7	0.5	60.39	6.59	21.8	58.0	0.116	1.02	-70	
		10.2	0.5	60.39	6.59	21.8	58.0	0.116	1.02	-70	
		12.7	0.5	60.39	6.59	21.8	58.0	0.116	1.02	-70	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Level Depth (ft-bmp)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1005	1030	0.5	13	---	---	60.39	1031	CMW026-WB120606-0001

Notes:
 Ferrrous iron: 2.12 mg/L
 Hydrogen sulfide: 0.18 mg/L
 Pumped purge water to Drum No. compound tank.

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAI Environmental Management, Inc.

Project Name: Farmex C-6 **Date:** 12/06/06
Project No.: EM 2727 **Prepared By:** KL
Well Identification: IRZMW005 **Weather:** SUNNY
Measurement Point Description: TOC, Mark **Pump Intake:** ~ 78" **Screen:** 65-90"

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A - B = C)	LNAPL Thickness (ft-bmp)	Casing Volumes (gallons)			Above Screen Volume (Top screen - DTM) (X, Y)	1/2 screen Volume
					One (1) Casing Volume (C x D = E)	Three (3) Casing Volumes (E x 3)	1/2 Casing Volume (F, G)		
---	<u>61.30</u>	<u>87.94</u>	---	---	---	---	---	---	<u>2.8</u>

Field Equipment: Solinst, Horiba

Well Diameter (in)	Gallons/Foot	Purge Method:	Well Condition:
0.75	<u>4</u> / 2	<u>Monsieur</u>	<u>Good</u>
0.02	<u>0.63</u> / 0.16		

Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1316		<u>3.8</u>	<u>0.5</u>	<u>61.58</u>	<u>6.67</u>	<u>22.2</u>	<u>69.2</u>	<u>0.158</u>	<u>1.36</u>	<u>-91</u>	<u>Pump, tube & FTC Vol.</u>
1321		<u>0.3</u>	<u>0.5</u>	<u>61.58</u>	<u>6.65</u>	<u>22.3</u>	<u>69.0</u>	<u>0.156</u>	<u>0.61</u>	<u>-96</u>	
1326		<u>8.8</u>	<u>0.5</u>	<u>61.58</u>	<u>6.63</u>	<u>22.4</u>	<u>70.2</u>	<u>0.155</u>	<u>0.55</u>	<u>-95</u>	
1331		<u>11.3</u>	<u>0.5</u>	<u>61.58</u>	<u>6.64</u>	<u>22.4</u>	<u>67.8</u>	<u>0.155</u>	<u>0.53</u>	<u>-98</u>	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x .80)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1309	1331	0.5	11.5	---	---	61.58	1332	IRZMW005_W12A006_0001

Notes:
 Ferrus iron: 0.52 mg/L
 Hydrogen sulfide: 0.6678 mg/L
 Pumped purge water to tank.

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc

Project Name: QUARTZ WDR C-6 **Date:** 12/6/06
Project No.: EM 2127 **Prepared By:** CW
Well Identification: IRZCMW001 **Weather:** SUNNY
Measurement Point Description: TOC BLACKMARK **Pump Intake:** ~105' **Screen:** 92-117'

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	A	B	C	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C X D = E)	Three (3) Casing Volumes (gallons) (E X 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW) (X, Y)	1/2 screen Volume
---	60.50				-	N/A	N/A	N/A	N/A	N/A
60.50	55.90					N/A	N/A	N/A	N/A	N/A
60.50	55.90					N/A	N/A	N/A	N/A	N/A

Field Equipment: Solinst, Horiba
Purge Method: S.S. MONSIEUR
Well Condition: GOOD

Time	Casing/Screen Purged (gallons)	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1105	4.8	4.8	0.3	60.71	7.38	22.4	70	0.130	0.00	8	CLEAR
1110	6.3	6.3	0.3	60.70	7.39	22.9	38	0.180	0.00	14	CLEAR
1115	7.8	7.8	0.3	60.70	7.38	22.9	21	0.180	0.00	20	CLEAR
1120	9.3	9.3	0.3	60.70	7.37	23.0	25	0.180	0.00	20	CLEAR
1125	10.8	10.8	0.3	60.70	7.38	23.0	0	0.180	0.00	20	CLEAR
1130	12.3	12.3	0.3	60.70	7.38	23.0	0	0.180	0.00	20	CLEAR
1135	13.8	13.8	0.3	60.70	7.38	23.0	0	0.180	0.00	20	CLEAR

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	80% Recovery Level Depth (ft-bmp)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1050	1135	0.3	15	76.82	60.70	1140	IRZCMW001 - W4120606-0001

Notes: Ferrous Iron 0.01 mg/L
 Hydrogen Sulfide 0.084 mg/L
 Dup.

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TMT Environmental Management, Inc

Project Name: Quarterly WDR Sampling: C-6 Date: 12/06/06
 Project No.: EM 2727 Prepared By: KC

Well Identification: IRZ MW004 Weather: Sunny
 Measurement Point Description: IDC, Mark Pump Intake: 78 Screen: 65-10

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	A	B	C	E	Three Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (ft-bmp)	Above Screen Volume (Top screen - DTW x D)	1/2 Screen Volume
---	61.76 61.76	90.65	---	---	---	---	---	---	2.8

Field Equipment: Solinst, Horiba
 Purge Method: Nonsoon Pump
 Well Condition: Good

Well Diameter (in)	Gallons per foot of casing	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
0.75	2	3.8	0.5	61.81	6.87	21.9	45.1	0.198	3.04	-93	Tube, Pump & FTC Vol.
0.02	0.16	6.3	0.5	61.83	6.88	22.0	50.0	0.198	3.03	-96	
		8.8	0.5	61.83	6.87	22.1	49.6	0.197	3.01	-96	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (ft-bmp)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1107	1125	0.5	9.0	---	---	61.83	1126	IRZ MW004-W6120606-0001

Notes: Ferrous Iron: 1.29.
Hydrogen sulfide: 0.3074 mg/L
Pumped purge water to compound tank.
 Drum No. ---

ft-bmp = feet below measuring point



TAI Environmental Management, Inc

Groundwater Sampling Data Sheet

Page of

Project Name: <u>Marberry WDR C-6</u>		Date: <u>12/4/06</u>									
Project No.: <u>EM 2727</u>		Prepared By: <u>LW</u>									
Well Identification: <u>IR2MW001B</u>		Weather: <u>SUNNY</u>									
Measurement Point Description: <u>TOC BACKMARK</u>		Pump Intake: <u>85'</u>									
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	Pump Intake:			Screen:			
					One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Screen Volume (Screen length x D)	1/2 screen Volume		
--	① 65.07 ② 65.07 ③ 65.07	89.93	24.80	--	N/A	N/A	N/A	3.3	N/A	N/A	
Field Equipment: Solinst, Horiba											
Well Diameter (in)		Gallons/Foot	Purge Method: <u>SS. MONSOON</u>		Well Condition: <u>GOOD</u>						
Gallons per foot of casing		0.75	2	4	6						
		0.02	0.16	0.65	1.47						
Time	Casing/Screen (ft-bmp)	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1350	1.5	4.3	0.28	65.11	6.96	23.6	10	0.180	0.00	12	clear / NO ODOR
1355	1.5	5.8	0.3	65.11	6.96	23.3	20	0.180	0.00	15	clear / NO ODOR
1400	1.5	7.3	0.3	65.11	6.93	23.2	33	0.179	0.00	22	clear / NO ODOR
1405	1.5	8.8	0.3	65.11	6.93	23.1	32	0.179	0.00	25	clear / NO ODOR
1410	1.5	10.3	0.3	65.11	6.94	23.1	32	0.179	0.00	26	clear / NO ODOR
1415	1.5	11.8	0.3	65.11	6.94	23.1	32	0.179	0.00	25	clear / NO ODOR
1420	1.5	13.3	0.3	65.11	6.94	23.3	32	0.179	0.00	25	clear / NO ODOR
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x .80) - B	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification			
1335	1420	0.3	156	15.6	70.04	65.11	1425	IR2MW001B - Wg120406-0002			
Notes:		FB-TIT 120406-0001 AT 1345 Ferro Iron: 0.06 mg/L Hydrogen Sulfide: 0.04 mg/L DISPOSED OF WATER IN COMPOUND									

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc

Project Name: C-0 Quarterly WDR Sampling Event
Date: 12/04/00
Prepared By: KC
Project No.: EM 2777
Weather: Sunny
Well Identification: IRZCMW002
Pump Intake: 108.5
Measurement Point Description: TDC, Mark
Screen: 96-12J

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C X D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (ft-bmp)	Tube Above-Screen Volume (ft-bmp)	Screen Volume (Screen length x 1/2)	1/2 screen Volume
11.60	121.34							4.0 liters		

Field Equipment: Solinst, Horiba
Purge Method: Low-Flow / Monsoon Pump
Well Condition: Good

Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (ft-bmp)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
1400	Initial Purge	5.0	0.5	14.64	6.82	21.3	44.2	0.202	0.00	-113	Pump, tapping id
1405		7.5	0.5	14.64	6.83	21.4	44.2	0.196	0.00	-116	FTC Volume
1410		10.0	0.5	14.64	6.84	21.4	45.1	0.196	0.00	-116	
1415		12.5	0.5	14.64	6.87	21.4	44.9	0.194	0.00	-117	

Purge Start Time	Purge End Time	Average Flow (LPM)	Total Gallons Purged	80% Recovery Water Level Depth (ft-bmp)	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
1350	1415	0.5	13.0		64.66	1416	IRZCMW002-106120400-0001

Notes:
 Ferrons iron: 3.19 mg/L
 Hydrogen sulfide: 0.1378 mg/L
 Pumped purge water to compound tank

ft-bmp = feet below measuring point



TAI Environmental Management, Inc

Groundwater Sampling Data Sheet

Project Name: <u>Che Quintero y Wile GW Sampling</u>		Date: <u>12/04/06</u>											
Project No.: <u>EM 2727</u>		Prepared By: <u>KL</u>											
Well Identification: <u>CMW001</u>		Weather: <u>Sunny</u>											
Measurement Point Description: <u>TOC, Mark</u>		Pump Intake: <u>112</u>											
Depth to LNAPL (ft-bmp)	A	Depth to Static Water Level (ft-bmp)	B	Well Total Depth (ft-bmp)	C	Water Column Height (ft) (A - B = C)	LNAPL Thickness (ft-bmp)	E	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Screen Volume (Screen length x D)	1/2 screen volume
		<u>6356</u> <u>6356</u>	<u>12435</u>	<u>60.79</u>				<u>4 liters +</u> <u>1 liter for flow through cell & pump = 5 liters</u>					
Well Diameter (in)		Gallons/Foot		Field Equipment: <u>Solinst, Horiba</u>									
Well Diameter (in)		0.75	2	4	6	Purge Method: <u>Low-Flow / Monsoon Pump</u>		Well Conditions: <u>Good</u>					
Gallons per foot of casing		0.02	0.16	0.65	1.47								
Time	Casing/Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations		
<u>1250</u>	<u>Initial Purge</u>	<u>5.0</u>	<u>0.5</u>	<u>63.79</u>	<u>7.45</u>	<u>23.1</u>	<u>2.7</u>	<u>72.4</u>	<u>1.60</u>	<u>-99</u>	<u>clear/water</u>		
<u>1255</u>		<u>7.5</u>	<u>0.5</u>	<u>63.79</u>	<u>7.38</u>	<u>23.3</u>	<u>3.5</u>	<u>71.8</u>	<u>0.31</u>	<u>-95</u>			
<u>1300</u>		<u>10.0</u>	<u>0.5</u>	<u>63.79</u>	<u>7.36</u>	<u>23.4</u>	<u>3.4</u>	<u>71.8</u>	<u>0.06</u>	<u>-94</u>			
<u>1305</u>		<u>12.5</u>	<u>0.5</u>	<u>63.79</u>	<u>7.34</u>	<u>23.4</u>	<u>3.5</u>	<u>71.8</u>	<u>0.04</u>	<u>-93</u>			
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	Total * Casing Volumes Purged	80% Recovery Water Level Depth (C x .80) = B	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification				
<u>1240</u>	<u>1305</u>	<u>0.5</u>	<u>13.0</u>	<u>13.0</u>	<u>13.0</u>	<u>63.79</u>	<u>1306</u>	<u>CMW001-W6120406-0001</u>					
Notes: <u>Ferrous iron: 0.17 mg/L</u> <u>Hydrogen sulfide: 0.022 mg/L</u> <u>Purge water pumped to compound tank</u>													

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

TAIT Environmental Management, Inc

Project Name: QUINCY WDR C-6		Date: 12/4/06	Prepared By: LW		Weather: SUNNY		Pump Intake: 86'		Screen: 88'-93'		
Well Identification: IRZMW002B		Measurement Point Description: TOC BLACKWATER		Pump Intake: E		Pump Intake: E		Pump Intake: E		Pump Intake: E	
Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C x D = E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Above Screen Volume (Top screen - DTW) x D	1/2 screen Volume	Screen: 88'-93'	
										Above Screen Volume (Top screen - DTW) x D	1/2 screen Volume
① 65.18	① 65.18	89.90	24.72	---	N/A	N/A	N/A	N/A	3.3	N/A	N/A
② 65.18	② 65.18	89.90	24.72	---	N/A	N/A	N/A	N/A	3.3	N/A	N/A
③ 65.18	③ 65.18	89.90	24.72	---	N/A	N/A	N/A	N/A	3.3	N/A	N/A
Well Diameter (in)		Gallons/Foot		Field Equipment: Solinst, Horiba		Purge Method: SS. MONSON		Well Condition: GOOD		Observations	
0.75		2 4 6		Solinst, Horiba		SS. MONSON		GOOD		Observations	
Gallons per foot of casing		0.16		1.47		Well Condition: GOOD		Well Condition: GOOD		Observations	
Time	Casing/Screen (in) (A/B)	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/CM)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
12:40	1.5 / 1.5	4.3	0.28	65.39	6.90	23.2	720	0.180	0.04	19	Cloudy / 0.00
12:45	1.5 / 1.5	6.8	0.3	65.41	6.83	23.5	120	0.235	0.00	20	Cloudy / 0.00
12:50	1.5 / 1.5	7.3	0.3	65.42	6.82	23.7	69	0.240	0.00	26	Cloudy / 0.00
12:55	1.5 / 1.5	8.8	0.3	65.42	6.83	23.5	33	0.239	0.00	31	Cloudy / 0.00
13:00	1.5 / 1.5	10.3	0.3	65.42	6.84	23.5	35	0.238	0.00	32	Cloudy / 0.00
13:05	1.5 / 1.5	11.8	0.3	65.42	6.83	23.5	34	0.239	0.00	31	Cloudy / 0.00
13:10	1.5 / 1.5	13.3	0.3	65.42	6.83	23.5	34	0.239	0.00	31	Cloudy / 0.00
Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x 80) - B	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification			
12:25	13:10	0.3	15.6	15.6	70.12	65.42	13:15	IRZMW002B - W(120406-0001)			

Notes: 1220 - EB - TAIT 120406-0001
 Ferrrous Iron: 0.08 mg/L
 Hydrogen Sulfide: 0.0636 mg/L
 DISPOSED OF WATER (1 COMPUND)

ft-bmp = feet below measuring point



Groundwater Sampling Data Sheet

Project Name: Quarry WE4 - C-6
Project No.: EM 2727
Well Identification: IRZMW-003B
Measurement Point Description: TOC, BLACK MARK

Depth to LNAPL (ft-bmp)	Depth to Static Water Level (ft-bmp)	Well Total Depth (ft-bmp)	Water Column Height (ft) (A-B=C)	LNAPL Thickness (ft-bmp)	One (1) Casing Volume (gallons) (C X D=E)	Three (3) Casing Volumes (gallons) (E x 3)	1/2 Casing Volume (E/2)	Screen Volume (Screen length x D)	1/2 screen Volume
---	① 65.19 ② 65.19	92.85	27.66	---	N/A	N/A	N/A	N/A	N/A

Field Equipment: Solinst, Horiba
Purge Method: S.S. MONSOON
Well Conditions: GOOD

Time	Casing Screen INTAKE	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/M)	Dissolved Oxygen (mg/L)	ORP (mV)	Observations
11:25	Purge Like	4.2	0.38	65.22	6.92	22.3	0	0.258	0.00	8	Close/NO ODOR
11:30	1.5	5.7	0.38	65.22	6.90	22.4	27	0.229	0.00	10	Close/NO ODOR
11:35	1.5	7.2	0.38	65.21	6.93	22.7	84	0.204	0.00	6	Close/NO ODOR
11:40	1.5	8.7	0.38	65.21	6.93	22.7	10	0.200	0.00	5	Close/NO ODOR
11:45	1.5	10.2	0.38	65.21	6.93	22.7	10	0.201	0.00	5	Close/NO ODOR
11:50	1.5	11.7	0.38	65.21	6.93	22.7	10	0.201	0.00	5	Close/NO ODOR
11:55	1.5	13.2	0.38	65.21	6.93	22.7	10	0.201	0.00	5	Close/NO ODOR

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Casing Volumes Purged	80% Recovery Water Level Depth (C x .80) - B	Water Level at Sampling Time (ft-bmp)	Sample Collection Time	Sample Identification
11:10	11:55	0.38	146.08	70.72	65.22	12:00	IRZMW003B-WG120406-0001 Ferrous Iron = 0.10. mg/L Hydrogen Sulfide = 0.00. mg/L

Notes: EB-TAIT 20406-0001 AT 1105
 Total Casing Volumes Purged: 146.08

ft-bmp = feet below measuring point



Tait Environmental Management, Inc.
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QA/QA Sample Identification Form

Project Name: C-6 Turrance Dec Rock GW Sampling **EM 2727** Project#: **EM 2727**

Date	Time	QA/QC Sample Type (Duplicate, Field Blank, Equipment Blank, Split)	Sample ID	Sample Location	Primary Sample Reference	Analytical Method(s)	Organic-Free Water Source and Reference	Name	Comments
12/4/06	---	Trip	TB-TAITR0406001			8260B	TA		
11/05	11:05	Equipment	EB-TAITR0506001	Compound		8260B	TA	LW	
			FB-TAITR0506001						
13:45	13:45	Field	FB-TAITR06001			8260B	TA	LW	
			DB-TAITR06001	Compound		8260B	TA	LW	
14:30	14:30	Duplicate	IRZM001B	IRZM001B	IRZM001B	Various	TA	LW	
			IRZM001B	IRZM001B	IRZM001B	Various	TA	LW	
12/6/06	---	Trip	TB-TAITR0606001			8260B	TA	LW	
			EB-TAITR0606001	Compound		8260B	TA	KL	
8:30	8:30	Field	FB-TAITR0606001			8260B	TA	LW	
			DB-TAITR0606001	Compound		8260B	TA	KL	
12/6/06	---	Trip	TB-TAITR0706001			8260B	TA	LW	
			EB-TAITR0706001	Compound		8260B	TA	KL	
8:30	8:30	Equipment	EB-TAITR0706001	Compound		8260B	TA	KL	
			FB-TAITR0706001	IRZB0095		8260B	TA	KL	
9:00	9:00	Decon	DB-TAIR0706001	Compound		8260B	TA	KL	

